

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A composite implant for repairing a tissue defect in a patient, comprising:

a wedge-shaped porous tissue scaffold formed from a bioresorbable, synthetic polymeric material and including at least one pocket containing a viable tissue having cells capable of migrating into the scaffold, wherein the viable tissue ~~is harvested from healthy tissue~~ comprises naturally occurring cells and their extracellular matrix, and wherein the viable tissue is minced to form finely minced tissue fragments.

2. (Cancelled)

3. (Previously Presented) The composite implant of claim 1, further comprising at least one bioactive substance applied to the viable tissue and effective to stimulate cell growth.

4. (Original) The composite implant of claim 3, wherein the bioactive substance is selected from the group consisting of a blood clots, platelet rich plasma, cartilage-derived morphogenic proteins, recombinant human growth factors, and combinations thereof.

5. (Original) The composite implant of claim 1, wherein the tissue scaffold includes top and bottom portions.

6. (Original) The composite implant of claim 5, wherein the top and bottom portions are at least partially mated to one another.

7. (Cancelled)

8. (Cancelled)

9. (Previously Presented) The composite implant of claim 1, wherein the pocket comprises a hollow interior formed in the tissue scaffold.

10. (Previously Presented) The composite implant of claim 1, wherein the pocket comprises at least one lumen extending into the tissue scaffold.
11. (Cancelled)
12. (Cancelled)
13. (Currently Amended) A composite implant for repairing a tissue defect in a patient, comprising:
a wedge-shaped porous tissue scaffold having at least one pocket formed therein; and
a viable tissue disposed within the at least one pocket in the scaffold, the viable tissue comprising naturally occurring cells and their extracellular matrix, the naturally occurring and having viable cells being capable of migrating into the scaffold, and the viable tissue comprising at least one of being finely minced to form minced, sliced, and slivered tissue fragments, wherein the viable tissue is harvested from healthy tissue.
14. (Original) The composite implant of claim 13, wherein the tissue scaffold is formed from at least one material selected from the group consisting of natural polymers, synthetic polymers, and combinations thereof.
15. (Original) The composite implant of claim 13, further comprising at least one bioactive substance applied to the viable tissue and effective to stimulate cell growth.
16. (Original) The composite implant of claim 15, wherein the bioactive substance is selected from the group consisting of a blood clots, platelet rich plasma, cartilage-derived morphogenic proteins, recombinant human growth factors, and combinations thereof.
17. (Original) The composite implant of claim 13, wherein the tissue scaffold includes top and bottom portions.

18. (Original) The composite implant of claim 17, wherein the top and bottom portions are at least partially mated to one another.
19. (Cancelled).
20. (Previously Presented) The composite implant of claim 13, wherein the pocket comprises a hollow interior formed in the tissue scaffold.
21. (Previously Presented) The composite implant of claim 13, wherein the pocket comprises at least one lumen extending into the tissue scaffold.
22. (Cancelled)
23. (Cancelled)
24. (Currently Amended) A method for repairing defective tissue, comprising:
providing a tissue scaffold formed from a bioresorbable, synthetic polymeric material having at least one pocket formed therein and adapted to contain a viable tissue, the at least one pocket including an opening formed in a sidewall of the tissue scaffold;
obtaining a viable tissue comprising naturally occurring cells and their extracellular matrix harvested from healthy tissue;
mincing the viable tissue to form finely minced tissue particles;
loading the viable tissue into the at least one pocket of the tissue scaffold; and
implanting the tissue scaffold with the viable tissue disposed therein at a defect site in a patient's body such that native tissue surrounding the tissue scaffold abuts the opening in the at least one pocket to maintain the viable tissue therein; and
migrating cells out of the viable tissue into the scaffold.
25. (Original) The method of claim 24, further comprising the step of applying at least one bioactive substance to the viable tissue to stimulate cell growth.

26. (Original) The method of claim 25, wherein the bioactive substance is selected from the group consisting of a clot, platelet rich plasma, cartilage-derived morphogenic proteins, recombinant human growth factors, and combinations thereof.
27. (Original) The method of claim 24, wherein the tissue scaffold includes top and bottom portions.
28. (Original) The method of claim 27, wherein the top and bottom portions are at least partially mated to one another.
29. (Cancelled).
30. (Original) The method of claim 24, wherein the tissue scaffold is substantially wedge-shaped and the pocket comprises a hollow interior formed in the tissue scaffold.
31. (Original) The method of claim 24, wherein the tissue scaffold is substantially wedge-shaped, and the pocket comprises at least one lumen extending into the tissue scaffold.
32. (Withdrawn) The method of claim 24, wherein the tissue scaffold includes at least one surface feature formed thereof to promote blood vessel formation.
33. (Withdrawn) The method of claim 32, wherein the at least one surface feature comprises a plurality of channels formed on an outer surface of the tissue scaffold.
34. (Currently Amended) A method for repairing defective tissue, comprising:
providing a tissue scaffold having at least one pocket formed therein, the at least one pocket including an opening formed in a sidewall of the tissue scaffold;
obtaining a viable tissue comprising naturally occurring cells and their extracellular matrix harvested from healthy tissue;
preparing the viable tissue to form finely minced tissue fragments ~~selected from the group consisting of minced, sliced, or slivered tissue fragments~~;

loading the tissue fragments into the at least one pocket of the tissue scaffold;

implanting the tissue scaffold with the tissue fragments disposed therein at a defect site in a patient's body such that native tissue surrounding the tissue scaffold abuts the opening in the at least one pocket to maintain the viable tissue therein; wherein cells migrate out of the viable tissue fragments into the scaffold.

35. (Original) The method of claim 34, wherein the tissue scaffold is formed from at least one material selected from the group consisting of natural polymers, synthetic polymers, and combinations thereof.

36. (Original) The method of claim 34, further comprising the step of applying at least one bioactive substance to the tissue fragments to stimulate cell growth.

37. (Original) The method of claim 36, wherein the bioactive substance is selected from the group consisting of a blood clots, platelet rich plasma, cartilage-derived morphogenic proteins, recombinant human growth factors, and combinations thereof.

38. (Original) The method of claim 34, wherein the tissue scaffold is substantially wedge-shaped and the pocket comprises a hollow interior formed in the tissue scaffold.

39. (Original) The method of claim 34, wherein the tissue scaffold is substantially wedge-shaped, and the pocket comprises at least one lumen extending into the tissue scaffold.

40. (Cancelled)

41. (Cancelled)

42. (Previously Presented) The composite implant of claim 1, wherein cells from the viable tissue in the pocket of the scaffold populate at least a portion of the scaffold.

43. (Currently Amended) The composite implant of claim 1, wherein at least a portion of the scaffold is capable of being populated with cells from the native tissue ~~populate at least a portion of the scaffold following implantation.~~
44. (Previously Presented) The composite implant of claim 13, wherein the tissue fragment has a thickness in the range from about 200 μm to about 3 mm.
45. (Previously Presented) The composite implant of claim 13, wherein the tissue fragment has a particle size in the range from about 0.5 mm^3 to about 3 mm^3 .
46. (Previously Presented) The composite implant of claim 13, wherein cells from the viable tissue in the pocket of the scaffold populate at least a portion of the scaffold.
47. (Currently Amended) The composite implant of claim 13, wherein at least a portion of the scaffold is capable of being populated with cells from the native tissue ~~populate at least a portion of the scaffold following implantation.~~
48. (Previously Presented) The method of claim 24, wherein cells from the viable tissue in the pocket of the scaffold populate at least a portion of the scaffold.
49. (Currently Amended) The method of claim 24, wherein at least a portion of the scaffold is capable of being populated with cells from the native tissue ~~populate at least a portion of the scaffold following implantation.~~
50. (Previously Presented) The method of claim 34, wherein the tissue fragment has a thickness in the range from about 200 μm to about 3 mm.
51. (Previously Presented) The method of claim 34, wherein the tissue fragment has a particle size in the range from about 0.5 mm^3 to about 3 mm^3 .

52. (Previously Presented) The method of claim 34, wherein cells from the viable tissue in the pocket of the scaffold populate at least a portion of the scaffold.

53. (Currently Amended) The method of claim 34, wherein at least a portion of the scaffold is capable of being populated with cells from the native tissue ~~populate at least a portion of the scaffold following implantation.~~